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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application of: Kenneth S. Bloom, et al.

Appeal No.:

Serial No.: 10/799,114

Filing Date: March 11, 2004

Confirmation No.: 7090

Title: TAMPER-INDICATING
CLOSURE, PACKAGE AND
METHOD OF MANUFACTURE

Attorney Docket: 18420

Group Art Unit: 3781

Examiner: R. A. Hylton

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

On July 5, 2007
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(Name of Person Signing Paper)

Diana Castillo
(Signature of Person Signing Paper)

APPEAL BRIEF

Applicant has appealed the rejection of claims 1-12. Notice of Appeal with appropriate fee was filed on May 8, 2007, this Appeal Brief therefore being due on July 8, 2007.

Please charge the additional appeal fee, together with any other charges or fees associated with this submission, to Account No. 15-0875 (Owens-Illinois).

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1. Real Party In Interest

The present patent application is assigned to Owens-Illinois Closure Inc., which is a wholly owned subsidiary of OI Plastic Products FTS Inc., which is a wholly owned subsidiary of Owens-Illinois Group, Inc., which is a wholly owned subsidiary of Owens-Illinois, Inc., which is the real party in interest in this appeal.

2. Related Appeals and Interferences

There are no related appeals and interferences.

3. Status of Claims

Claims 1-15 are pending in the present application.

Claims 1-12 are rejected over the prior art, which rejection is the subject of the present appeal. (Claim 12 is stated to be rejected on the Summary Page of the Final Rejection, but no specific basis for rejection is given in the Detailed Action.)

Claims 13-15 are withdrawn.

No claims are allowed.

4. Status of Amendments After Final Rejection

No amendments after final rejection have been filed in the present application.

5. Summary of the Claimed Subject Matter

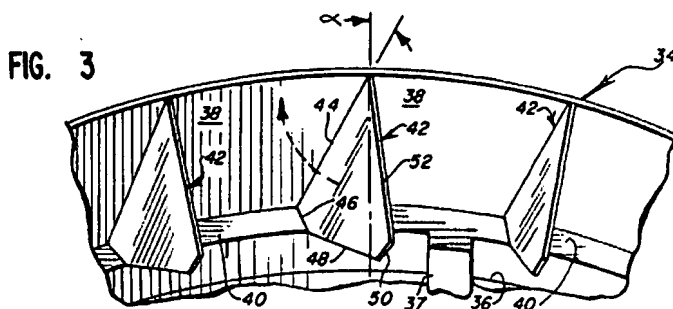
The appealed claims of the present application are directed to a tamper-indicating closure (claims 1-6) and to a tamper-indicating package that includes a closure on the finish of a container (claims 7-12). In general, a tamper-indicating closure is one that has a tamper band

frangibly connected to the closure skirt for at least partial separation from the closure skirt when the closure is first removed from a container to indicate that the package has been opened.

By way of background, the present invention is directed to a specific problem presented in connection with tamper-indicating closures having wing-type abutment elements that extend from the inside surface of the tamper band (specification page 1, line 5 to page 2, line 6). In the prior art, such wings are flat and flexibly connected to the inside surface of the tamper band

along lines that are disposed at a clockwise or positive angle with respect to the axis of the closure skirt as viewed from inside the skirt (page 1, lines 7-9). Wilde 4,418,828 (of record, see the Evidence Appendix) provides a clear illustration of this prior art in FIG. 3, reproduced above, in which the abutment wings 42 are connected to the inside surface of the closure skirt 38 along lines 44 that are at a clockwise angle alpha with respect to the axis of the closure skirt as viewed from inside the closure skirt.

Although the wing construction disclosed in Wilde is satisfactory in many applications, and in fact is quite common in cold soft drink applications, this wing construction is not satisfactory in applications in which the requirements for the closure are such that the closure must be unthreaded from the mold core on which it is molded, as distinguished from being merely axially pushed off of the mold core as is more typical (page 1, lines 15-19). In such manufacturing applications, the positive or clockwise-angle wings on the tamper band are folded and permanently



deformed as the closure is unthreaded from the mold core (page 1, lines 18-19). An objective of the present invention is to address this deficiency in the prior art (page 1, line 19 to page 2, line 6).

Independent claim 1 of the present application recites a tamper-indicating closure 26 that includes a base wall 34 having a cylindrical skirt 36 for removably engaging a container finish 24 and a tamper band 50 frangibly connected to the skirt (page 2, lines 10-12; page 5, lines 6-8 and 15-16). A plurality of wings 58 extend inwardly from an inner surface of the tamper band 50 for engaging the container finish (page 2, lines 12-13; page 6, lines 6-7). These wings are flexibly resiliently connected to the inner surface of the band along lines that are disposed at a clockwise

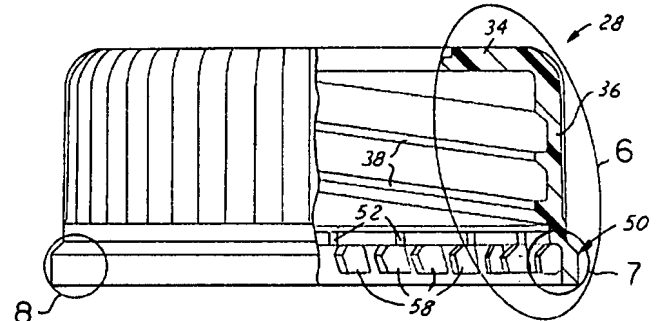


FIG. 5

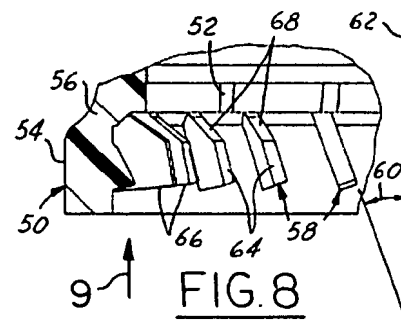
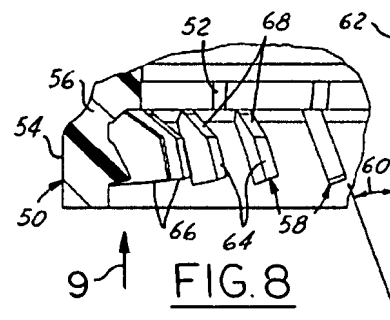
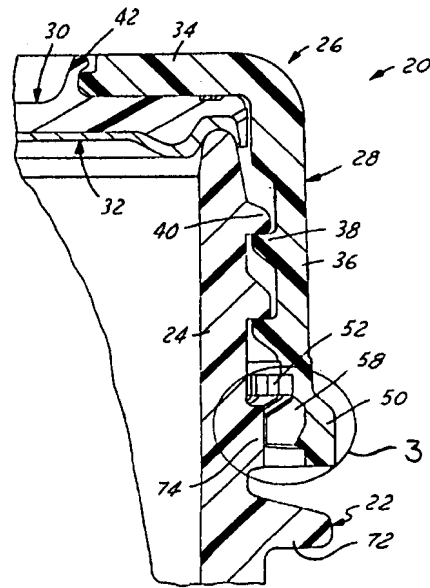


FIG. 8

angle 60 with respect to the axis 62 of the skirt as viewed from inside the skirt (page 2 lines 13-15; page 6, lines 9-13). This clockwise tilt angle 60 facilitates unthreading of the closure from its mold core without permanent deformation or distortion of wings 58 (page 6, lines 11-13; page 8, line 16 to page 9, line 10).

Independent claim 7 recites a tamper-indicating package that includes a container 22 having a finish 24 with at least one external thread segment 40 and a plurality of ratchet teeth (76 in FIG. 4) spaced from the thread segment (page 3, lines 1-3; page 5, lines 2-8; page 7, line 10). A tamper-indicating closure 26 includes a base wall 34 having a skirt 36 with at least one internal

thread segment 38 for engaging the external thread segment on the finish, a tamper band 50 frangibly connected to the skirt, and a plurality of wings 58 extending inwardly from an inner surface of the tamper band for engagement with the ratchet teeth on the finish (page 3, lines 3-7; page 5, lines 6-8 and 15-16; page 6, lines 6-7). The wings are resiliently flexibly connected to the inner surface of the band 50 along lines that are disposed at a clockwise angle 60 with respect to an axis 62 of the skirt as viewed from inside the skirt (page 3, lines 7-9; page 6, lines 9-13). This clockwise tilt angle 60 facilitates unthreading of the closure from its mold core without permanent deformation or distortion of wings 58 (page 6, lines 11-13; page 8, line 16 to page 9, line 10).



6. Grounds of Rejection to be Reviewed on Appeal

Independent claims 1 and 7 will be argued separately in this Appeal Brief. Thus, argument will be presented concerning the rejection of independent claim 1 as being anticipated by Kamath 5,320,234, the rejection of independent claims 1 and 7 as being anticipated by Przytulla 5,915,579, and the rejection of independent claims 1 and 7 as being anticipated by Ma 6,112,923.

For purposes of this appeal only, dependent claims 2-6 and 8-12 will be considered to stand or fall with the associated independent claims.

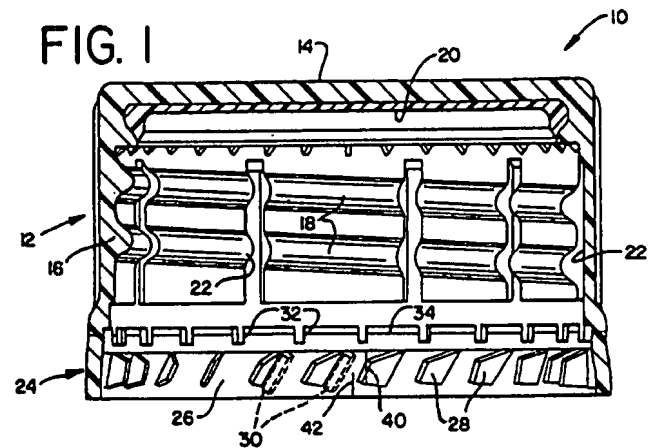
7. Argument

It is axiomatic that, in order to “anticipate” a claim, “all the elements in the claim (or possibly their equivalents...) must have been disclosed in a single prior art reference or device.” *Radio Steel & Mfg. Co. v. MTD Products, Inc.*, 731 F.2d 840, 845, 221 U.S.P.Q. 657, 661 (Fed. Cir. 1984). Moreover, “it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference.” *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1462 (BPAI 1990). If anticipation is based upon alleged inherency, such alleged inherency must be certain, and cannot be established by probabilities or speculation. *Ex parte Cyba*, 155 U.S.P.Q. 756 (POBA 1967); *Ex parte Keither*, 154 U.S.P.Q. 320 (POBA 1967). “It is improper for an examiner to attempt to rebuild a reference . . . , in light of appellant’s disclosure, in order for it to operate in a manner never intended or contemplated” by the reference in an effort to support a rejection based upon alleged anticipation. *Ex parte Garrett*, 132 U.S.P.Q. 514 (POBA 1961).

Simply stated, the cited references do not disclose or suggest provision of wings flexibly connected to the inner surface of the tamper band along lines that are disposed at a counterclockwise angle with respect to the axis of the skirt as viewed from inside the skirt, as recited in both independent claims 1 and 7. The references disclose either flexible wings disposed at a clockwise angle as in Wilde discussed above (Kamath), flexible wings disposed parallel to the closure axis (Przytulla), or a closure without flexible wings at all (Ma).

Rejection of Claims 1-4 and 6 under 35 USC 102(b) over Kamath 5,320,234

As clearly shown in FIG. 1 of Kamath, this reference discloses a tamper-indicating closure having flexible wings 28 connected to the inside surface 26 of the tamper band 24 along lines that are disposed at a clockwise angle with respect to the axis of the closure skirt as viewed from inside the skirt.



Independent claim 1 clearly recites that the wings of the present invention are flexibly connected to the inner surface of the tamper band along lines that are disposed at a counterclockwise angle with respect to the axis of the skirt as viewed from inside the skirt. Claim 1 clearly is not anticipated by Kamath.

The Examiner at page 5 of the Final Rejection suggests that claim 1 recites “an axis,” but does not specify where the axis is located with respect to any portion of the closure. The word “axis” is defined in *Webster’s Ninth New Collegiate Dictionary*, for example, as “a straight line about which a body or a geometric figure rotates or may be supposed to rotate ... a straight line with respect to which a body or figure is symmetrical.” Claim 1 expressly recites “a cylindrical skirt” and refers to “an axis of said skirt.” Persons of ordinary skill in the art clearly would understand that the “axis” of “a cylindrical skirt” is the axis of symmetry of the cylindrical skirt.

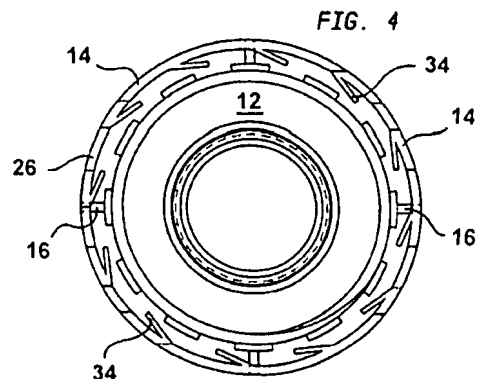
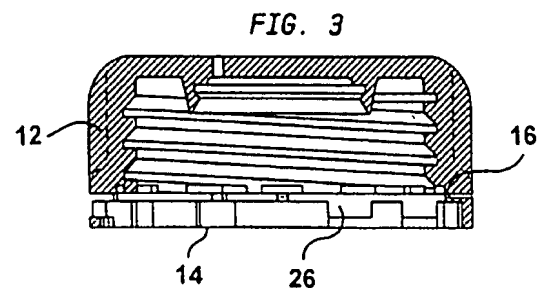
The Examiner suggests at page 5 of the Final Rejection that “the direction of “viewing” is not specified in the claims.” However, claim 1 clearly recites that the direction of viewing is “from inside said skirt.”

The Examiner suggests at page 5 of the Final Rejection that the wings of Kamath “all seem to be connected to lines that are disposed at a counterclockwise angle with respect to the axis of said skirt.” However, FIG. 1 of Kamath clearly shows that the lines of connection between the wings 28 and the inside surface 26 of the tamper band 24 are at a clockwise angle with respect to the axis of the closure skirt as viewed from inside the skirt, which is the direction of view in FIG. 1 of Kamath.

The rejection of dependent claims 2-4 and 6 over Kamath is not a separately argued.

Rejection of Claims 1, 3-5 and 7 under 35 USC 102(b) over Przytulla 5,915,579

The flexible wing elements 34 in Przytulla are connected to the inside surface of the tamper band 14 along lines that are parallel to the axis of the closure skirt as viewed from inside the skirt, as shown in FIG. 3 of that reference. Thus, Przytulla clearly does not anticipate either independent claim 1 or independent claim 7, both of which expressly recite that the wings are flexibly resiliently connected to the inner surface of the tamper band along lines that are disposed at a counterclockwise angle with respect to the axis of the skirt as viewed from inside the skirt.



The Examiner at page 5 of the Final Rejection suggests that claims 1 and 7 recite “an axis,” but do not specify where the axis is located with respect to any portion of the closure. The word “axis” is defined in *Webster’s Ninth New Collegiate Dictionary*, for example, as “a straight line about which a body or a geometric figure rotates or may be supposed to rotate ... a straight line with respect to which a body or figure is symmetrical.” Claim 1 expressly recites “a cylindrical skirt” and refers to “an axis of said skirt.” Persons of ordinary skill in the art clearly would understand that the “axis” of “a cylindrical skirt” is the axis of symmetry of the cylindrical skirt. Claim 7 recites an external thread segment on the container finish and an internal thread segment on the closure skirt for engages the external thread segment on the container finish. Persons of ordinary skill in the art clearly would understand that the “axis” recited in claim 7 is the axis of such threaded engagement, which is the axis of the closure skirt.

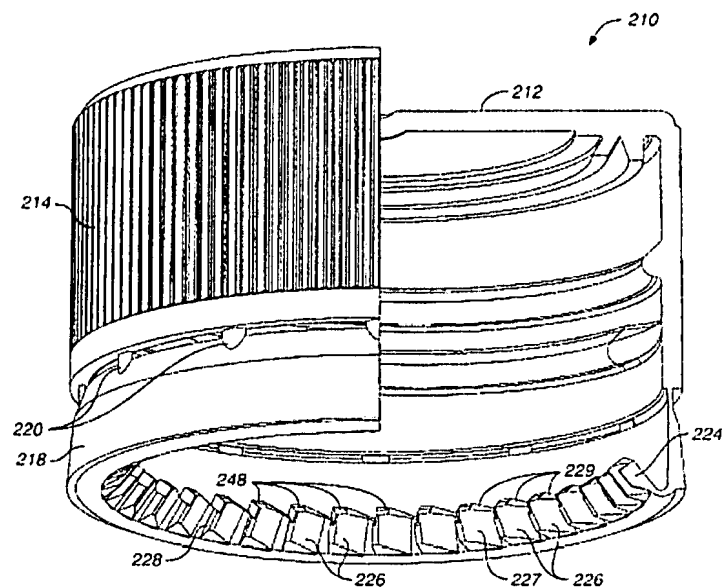
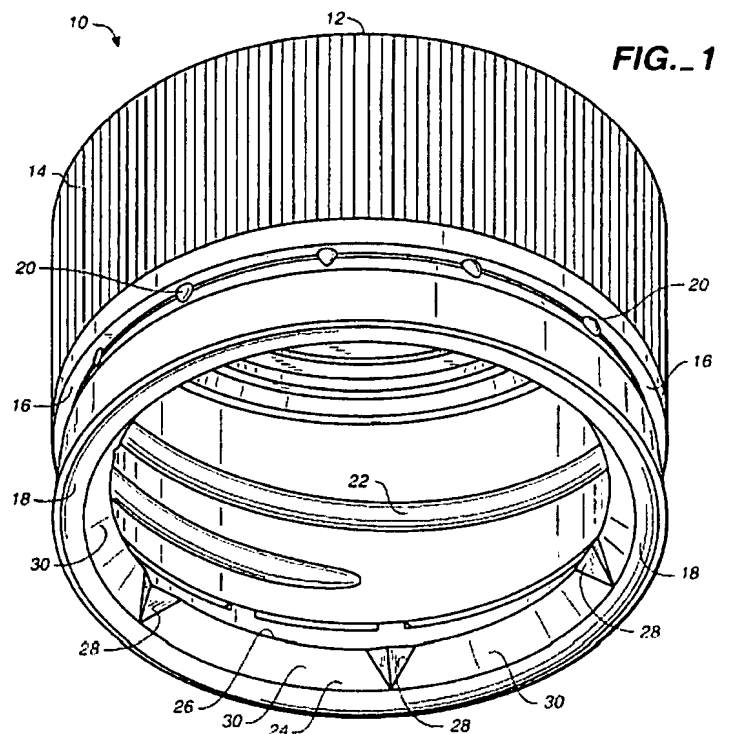
The Examiner suggests at page 5 of the Final Rejection that “the direction of “viewing” is not specified in the claims.” However, claims 1 and 7 clearly recite that the direction of viewing is “from inside said skirt.”

The Examiner suggests at page 5 of the Final Rejection that the wings of Przytulla “all seem to be connected to lines that are disposed at a counterclockwise angle with respect to the axis of said skirt.” However, FIG. 3 of Przytulla clearly shows that the lines of connection between the wings and the inside surface of the tamper band 14 are parallel to the axis of the closure skirt as viewed from inside the skirt, which is the direction of view in FIG. 3 of Przytulla.

The rejection of dependent claims 3-5 is not separately argued.

Rejection of Claims 1, 3-5 and 7 under 35 USC 102(b) over Ma 6,112,923

The closure disclosed in Ma is deficient in several respects insofar as independent claims 1 and 7 of the present application are concerned. First, none of the closure embodiments disclosed in Ma includes a plurality of wings extending inwardly from an inner surface of the tamper band and flexibly connected to the inner surface of the tamper band. Rather, all of the embodiments in Ma have an annular retaining rim (24 in FIGS. 1-11 and 224 in FIGS. 13-14) that extends from the free edge of the tamper band, with the rim having elements that engage the finish of the container. These elements are pleats 28 in the embodiment of FIG. 1, or “wedge or ramp elements” 226 in the embodiment of FIGS. 13 and 14. These wedge or ramp elements 226 are not flexibly connected to the underlying rim 224. Furthermore, as clearly shown in FIG. 13



of Ma, the wedge or ramp elements 226 are at a clockwise angle to the axis of the closure skirt as viewed from inside the skirt. Thus, the disclosure of the Ma reference clearly does not anticipate independent claim 1 or independent claim 7.

The Examiner at page 5 of the Final Rejection suggests that claims 1 and 7 recite “an axis,” but do not specify where the axis is located with respect to any portion of the closure. The word “axis” is defined in *Webster’s Ninth New Collegiate Dictionary*, for example, as “a straight line about which a body or a geometric figure rotates or may be supposed to rotate ... a straight line with respect to which a body or figure is symmetrical.” Claim 1 expressly recites “a cylindrical skirt” and refers to “an axis of said skirt.” Persons of ordinary skill in the art clearly would understand that the “axis” of “a cylindrical skirt” is the axis of symmetry of the cylindrical skirt. Claim 7 recites an external thread segment on the container finish and an internal thread segment on the closure skirt for engages the external thread segment on the container finish. Persons of ordinary skill in the art clearly would understand that the “axis” recited in claim 7 is the axis of such threaded engagement, which is the axis of the closure skirt.

The Examiner suggests at page 5 of the Final Rejection that “the direction of “viewing” is not specified in the claims.” However, claims 1 and 7 clearly recite that the direction of viewing is “from inside said skirt.”

The Examiner suggests at page 5 of the Final Rejection that “wings” of Ma “all seem to be connected to lines that are disposed at a counterclockwise angle with respect to the axis of said skirt.” However, FIG. 13 of Ma clearly shows that the lines of connection between the wedges 226 and the rim 224 (not the tamer band 218) are at a clockwise angle with respect to the axis of the closure skirt as viewed from inside the skirt, which is the direction of view in FIG. 13 of Ma.

The Examiner in the text bridging pages 5 and 6 of the Final Rejection suggests that the ramp elements or wedges 226 are “resiliently connected to the inside surface of the skirt (via the hinge of the tamper band).” The wedge elements 226 are indeed “flexibly connected” to the tamper band 218 by means of the retaining rim 224, but this connection is at the lower edge of the tamper band 218 and not to the inside surface of the tamper band. Furthermore, this “flexible connection” to the lower edge of the tamper band is around a circle in a plane perpendicular to the axis of the closure skirt, and not along lines at a counterclockwise angle with respect to the skirt as viewed from inside the skirt, as expressly required in both independent claims 1 and 7.

The rejection of dependent claims 3-5 is not separately argued.

Rejection of Dependent Claims 5 and 6 under 35 USC 103(b) in View of Przytulla 5,915,579

Dependent claims 5 and 6 are not separately argued in this Appeal Brief.

Rejection of Dependent Claims 8-9 under 35 USC 103(b) in View of Ma 6,112,923

Dependent claims 8 and 9 are not separately argued in this Appeal Brief.

Rejection of Dependent Claims 10-11 under 35 USC 103(b) over Ma 6,112,923 in View of Curry 4,548,329

Dependent claims 10-11 are not separately argued in this Appeal Brief.

It therefore is believed and respectfully submitted that the rejection of claims 1-12 should be reversed, and that these claims should be allowed.

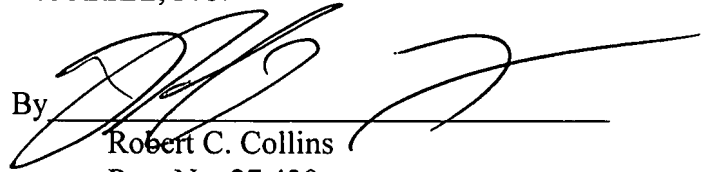
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(Owens-Illinois).

Respectfully submitted,

REISING, ETHINGTON, BARNES,
KISSELLE, P.C.

By

A handwritten signature in black ink, appearing to read 'RC Collins', is written over a horizontal line.

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8. Appendix of Appealed Claims

1.

1 A tamper-indicating closure that includes:
2 a base wall having a cylindrical skirt for removably engaging a container finish,
3 a tamper band frangibly connected to said skirt, and
4 a plurality of wings extending inwardly from an inner surface of said tamper band for
5 engaging a container finish,
6 said wings being flexibly resiliently connected to said inner surface of said band along
7 lines that are disposed at a counterclockwise angle with respect to an axis of said skirt as viewed
8 from inside said skirt.

2.

1 The closure set forth in claim 1 wherein said tamper band includes a portion stepped
2 radially outwardly with respect to said skirt and being contiguously connected to said skirt by an
3 interconnecting wall portion, and wherein said wings are integrally connected to said interconnecting
4 wall portion whereby stiffness of said wings to flexure with respect to said band is greater adjacent
5 to said interconnecting wall portion than remote from said interconnecting wall portion.

3.

1 The closure set forth in claim 1 wherein said angle is in the range of greater than 0°
2 to 35°.

4.

1 The closure set forth in claim 1 wherein said wings have a flat edge facing said base
2 wall at an angle of 25° to 45° with respect to said base wall.

5.

1 The closure set forth in claim 4 wherein said angle is 35°.

6.

1 The closure set forth in claim 1 wherein each of said wings has a thickness in the
2 range of 0.024 to 0.03 inch.

7.

1 A tamper-indicating package that includes:
2 a container having a finish with at least one external thread segment and a plurality
3 of external ratchet teeth spaced from said thread segment, and
4 a tamper-indicating closure that includes:
5 a base wall having a skirt with at least one internal thread segment for engaging said
6 external thread segment on said finish,
7 a tamper band frangibly connected to said skirt, and
8 a plurality of wings extending inwardly from an inner surface of said tamper band for
9 engagement with said ratchet teeth on said finish,

10 said wings being resiliently flexibly connected to said inner surface of said band along
11 lines that are disposed at a counterclockwise angle with respect to an axis of said skirt as viewed
12 from inside said skirt.

8.

1 The package set forth in claim 7 wherein angular spacing between said wings is less
2 than angular spacing between said ratchet teeth.

9.

1 The closure set forth in claim 8 wherein said angular spacing between said wings is
2 one-half of said angular spacing between said ratchet teeth.

10.

1 The package set forth in claim 7 wherein said ratchet teeth are disposed in two
2 diametrically opposed groups.

11.

1 The package set forth in claim 10 wherein at least some of said ratchet teeth have an
2 abutment face at an acute angle to a diameter of said finish.

12.

1 The package set forth in claim 7 wherein said tamper band includes a portion stepped
2 radially outwardly with respect to said skirt and being contiguously connected to said skirt by an
3 interconnecting wall portion, and wherein said wings are integrally connected to said interconnecting
4 wall portion such that stiffness of said wings to flexure with respect to said band is greater adjacent
to said interconnecting wall portion than remote from said interconnecting wall portion.

9. Evidence Appendix

Wilde 4,418,828 cited in the Information Disclosure Statement filed March 11, 2004 and made of record in the Office Action mailed August 17, 2006.

10. Related Proceedings Appendix

None.